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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/745,390
Filing Date: December 22, 2000
Appellant(s): MARK ET AL.

David M. O'Neill
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/15/2006.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Ground of Rejection to be Reviewed on Appeal

The rejection of claims 2, 3, 7-9 stand or fall with claim 1.

The rejection of claims 5, 6, 11, 12, 14, 15, 17, 19 and 20 stand or fall with claim 15.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,687,518	PARK
6,115,616	HALPERIN
4,740,431	LITTLE

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 7-9, 13 are rejected under 35 U.S.C. 103(a) as being unpatenable over PARK et al. (US Patent 6,687,518) in view of HALPERIN (US Patent 6,115,616). Claims 5, 6, 11, 12, 14, 15, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatenable over PARK et al. (US Patent 6,687,518) in view of HALPERIN (US Patent 6,115,616) and further in view of LITTLE (US Patent 4,740,431). These rejections are set forth in a prior Office Action, mailed on 07/14/2005 as followed:

1. Claims 1-3, 7-9, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US 6,687,518) in view of Halperin et al. (US 6,115,616).

Regarding claim 1, Park teaches a mobile station (see fig. 1; col. 23, lines 24-27), comprising: a communication part that comprises a controller (see fig. 1, the GMPCS system; col. 3, lines 1-11), an RF transceiver (see fig. 5, RF terminal 130; col. 7, lines 16-18) and an antenna (see fig. 6, antenna 410); and a information entry part comprising a keypad or keyboard module that is detachable from said communication part and that is coupled, whether attached or detached, through a wireless link to said

communication part for conveying keystroke information from said information entry part to said communication part (see figs. 2 and 3; col. 3, lines 39-46; col. 3, lines 57-67; col. 4, lines 42-48). However, Park does not mention that the information entry part is self-powered. Halperin, in an analogous art, teaches this limitation (col. 4, lines 13-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the keypad that uses a Lithium thin film battery of Halperin to in order to minimize the space occupied by the power source as taught by Halperin.

Regarding claim 2, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 1, wherein said wireless link is comprised of an RF link (see reference Park, col. 3, lines 57-67).

Regarding claim 3, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 1, wherein said wireless link is) comprised of a Bluetooth link (see reference Park, col. 3, lines 57-67).

Regarding claim 7, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 8, the claim has a limitation as that of claim 2, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 2.

Regarding claim 9, the claim has a limitation as that of claim 3, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 3.

Regarding claim 13, the claim has a limitation as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

2. Claims 5, 6, 11, 12, 14, 15, 17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park (US 6,687,518) in view of Halperin et al. (US 6,115,616) and further in view of Little (US 4,740,431).

Regarding claim 15, the claim, as mentioned above, has the limitations of claim 1 that are taught by the combination of Park and Halperin. However, Park and Halperin do not mention that the Lithium thin film battery is a solar cell. Little, in his Intergraded Solar Cell And Battery invention discloses a solar cell using Lithium thin film material (see col. 1, lines 51-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the Lithium thin film solar cell of Little to Halperin in order to have a simple, low cost way of providing power to a electronic device.

Regarding claim 5, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 4, wherein said source is comprised of at least one

solar cell (see reference Halperin, col. 4, lines 13-18; reference Little, col. 1, lines 51-60).

Regarding claim 6, the combination of the teachings of Halperin, Park, and Little teaches a mobile station as in claim 5, wherein said source is further comprised of at least one battery (see reference Halperin, col. 4, lines 13-18).

Regarding claim 11, the claim has a limitation as that of claim 5, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 5.

Regarding claim 12, the claim has a limitation as that of claim 6, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 6.

Regarding claim 14, the combination of the teachings of Halperin, Park, and Little teaches a method as in claim 13, and further comprising a step of powering said keypad module using a solar cell located on said keypad module (see reference Halperin, col. 4, lines 13-18; reference Little, lines 51-60).

Regarding claim 17, the claim has a limitation as that of claim 15, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 15.

Regarding claim 19, the combination of the teachings of Halperin, Park, and Little teaches an information entry module as in claim 17, wherein said wireless link is a uni-directional link (see reference Halperin, col. 3, lines 57-67).

Regarding claim 20, the combination of the teachings of Halperin, Park, and Little teaches an information entry module as in claim 17, wherein said wireless link is a bi-directional link (see reference Halperin, col. 3, lines 57-67).

(11) Response to Argument

Regarding independent claims 1, 7, and 13, Appellant argues that HALPERIN fails to disclose a self-powered information entry part as required in claim 1, 7, 13. Examiner disagrees.

According to the specifications of the application, the definition of the term "self-powered" is very broadly defined such that it does not limit to a use of a battery or a solar cell alone or in combination with each other. In fact, Appellant's citations in pages 9-10 of the brief defining the term also include the use of a battery. The claimed keypad of the invention, on page 10 of the appeal, requires a use of a optional battery under a low light conditions wherein the solar cell is not capable of generate its own power to support the claimed keypad. In other words, the solar cell needs the sunlight to recharge. This is similar to power supporting of Halperin's battery. The battery supported solar cell cited would contradict with the definition of "self-powered" by

Merriam-Webster online dictionary submitted by appellant on page 11 of the appeal. In addition, as stated in previous advisory action mailed 11/03/05 that the keypad of Halperin when detached from the portable unit can **independently** function as a whole, and can support power to itself by way of its own included battery (see col. 4, lines 13-18) without the need of any hardwired connection to an external power source. Therefore, Halperin reads on the self-powered keyboard which Appellant relies on.

I response to Appellant's argument, on page 12, that if "self-powered" already encompassed a mode of operation where the information entry part was solely batteru-powered then claim 6 would be a redundant. Examiner disagrees. Dependent claim is not redundant, just narrower than broader independent claim. If one would use this same argument against the Appellant's assertion that the self-powered is solar cell powered, then claim 5 would be redundant. Certainly this is not the case. The specific dependent claim merely further limits the broader independent claim.

In response to appellant's argument on page 12 that neither Park or Halperin show any appreciation for the detachable keypad module. Examiner disagrees. The folder-type keyboard of Park was presented so that it serves as a data inputting means that can be conveniently carried around by users while in communication mode with the portable ,device (see col. 1, lines 60-65; col. 4, lines 7-20).

The examiner's explanation for the rejections of claims 1, 7, and 13 related to the "self-powered" keypad of Halperin is herein incorporated regarding the "self-powered" of claim 15. In addition, examiner disagrees with appellant for the argument that Little does not discuss an information entry part. Examiner only relies on Little for the teaching of a integrated solar cell and storage batteries used in portable electronic devices for improving their operational efficiencies and allow their use in high power requirements (see Little, col. 2, lines 36-53).

Appellant, on page 15 of the appeal, argues that the keyboard of Halperin is passive for providing wired communication. This is one of the embodiments suggested by Halperin.

In response to applicant's argument that the examiner's conclusion of obviousness, regarding claim 15, is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In conclusion, Park, Halperin, and Little once combined teaches a portable keyboard that can wirelessly communicate with a communication terminal when either detached or attached from the terminal.

For the above reasons, it is believed that the rejections of claims 1-3, 5-9, 11-15, 17, 19, and 20 should be sustained.

Respectfully submitted,

Minh Dao
Art Unit 2618
April 27, 2006

Conferees
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